

5.2 LAND USE

5.2.1 Background

This section provides a summary of direct land use changes due to the Proposed Action and an evaluation of the compatibility of land uses in the area surrounding Gary/Chicago International Airport with aircraft noise dispersion.

5.2.2 Methodology

The impacts of the proposed project and its alternatives and adjoining land uses are assessed in accordance with FAA Order 5050.4, *Airport Environmental Handbook*. Also discussed in this section are other impacts of the proposed project on off-airport land uses and the consistency of the alternative with the comprehensive plans of the surrounding communities.

5.2.3 Existing Conditions -- 2000

The study area consists of a variety of land uses, such as residential, community services, industrial, manufacturing, commercial, and transportation facilities. A majority of the study area is zoned industrial/manufacturing with two notable areas zoned residential. Additionally, there are a few commercial corridors and an area zoned for commercial activities. The majority of the study area that lies within the City of Gary is part of an 8,200 acre Airport Development Zone (ADZ), which was established in 1993 to provide economic revitalization in the area surrounding the airport, indicating an interest in attracting commercial or industrial activities to the area.

Noise contours generated to illustrate the noise levels in 2000 included some residential land uses in the areas southeast of the runway within the 65 DNL contours. Other residential land uses were located outside of the 65 DNL contours.

5.2.4 Future Conditions -- 2007

5.2.4.1 Direct Land Use Impacts

5.2.4.1.1 No Action

The No Action alternative will result in little to no changes to Land Use in the areas surrounding the airport.

5.2.4.1.2 Future Build Condition

The improvements to the existing runway to conform to current FAA standards (including positive control of the southeast RPZ), improvements to provide additional runway length on Runway 12-30, expansion of the existing runway, and acquiring and/or reserving sites for future passenger terminal and air cargo facilities will create changes to the current land use in the study area. These future conditions will potentially include but not be limited to:

- The change in land use from business and industrial to airport use in the areas north and west of the existing airport. Properties will be acquired from 17 landowners as a part of the improvements needed to conform to current FAA standards. No additional fee simple acquisition will be required for the extension of the runway to the northwest or for the long-term cargo area. Additional properties will be assembled for long-term passenger terminal area uses from six landowners. These properties are either in use or have been previously used for industrial and transportation related activities. The RPZ in the northwest will be expanded across Highway 912 onto industrial property currently used for fuel storage, with an easement or use agreement over three acres needed.
- The change in land use from residential to airport use in the area southeast of the airport (specifically the southeast RPZ). Properties will be acquired from 47 landowners located in the RPZ. Forty-two of these properties contain homes.
- The change in one industrial land use located in the southeast RPZ to airport use.

5.2.4.2 Land-Use Compatibility

Land use compatibility for the purpose of assessing impact of airport projects is generally concerned with potential noise impacts to communities surrounding the site of the Proposed Action (see Section 5.1, Noise).

5.2.4.2.1 No Action

Forecast reductions in the noise emissions of aircraft that will use the airport in 2007 will further reduce the number of sensitive land uses within a 65 DNL contour. Consequently, under the No Action condition, the number of residences that will be exposed to a DNL of 65 or more, which is considered incompatible with residential structures and sensitive community facilities (e.g., a daycare center) under FAA guidelines, will decrease from approximately 71 residences exposed in 2000 to approximately 36 residences exposed in 2007.

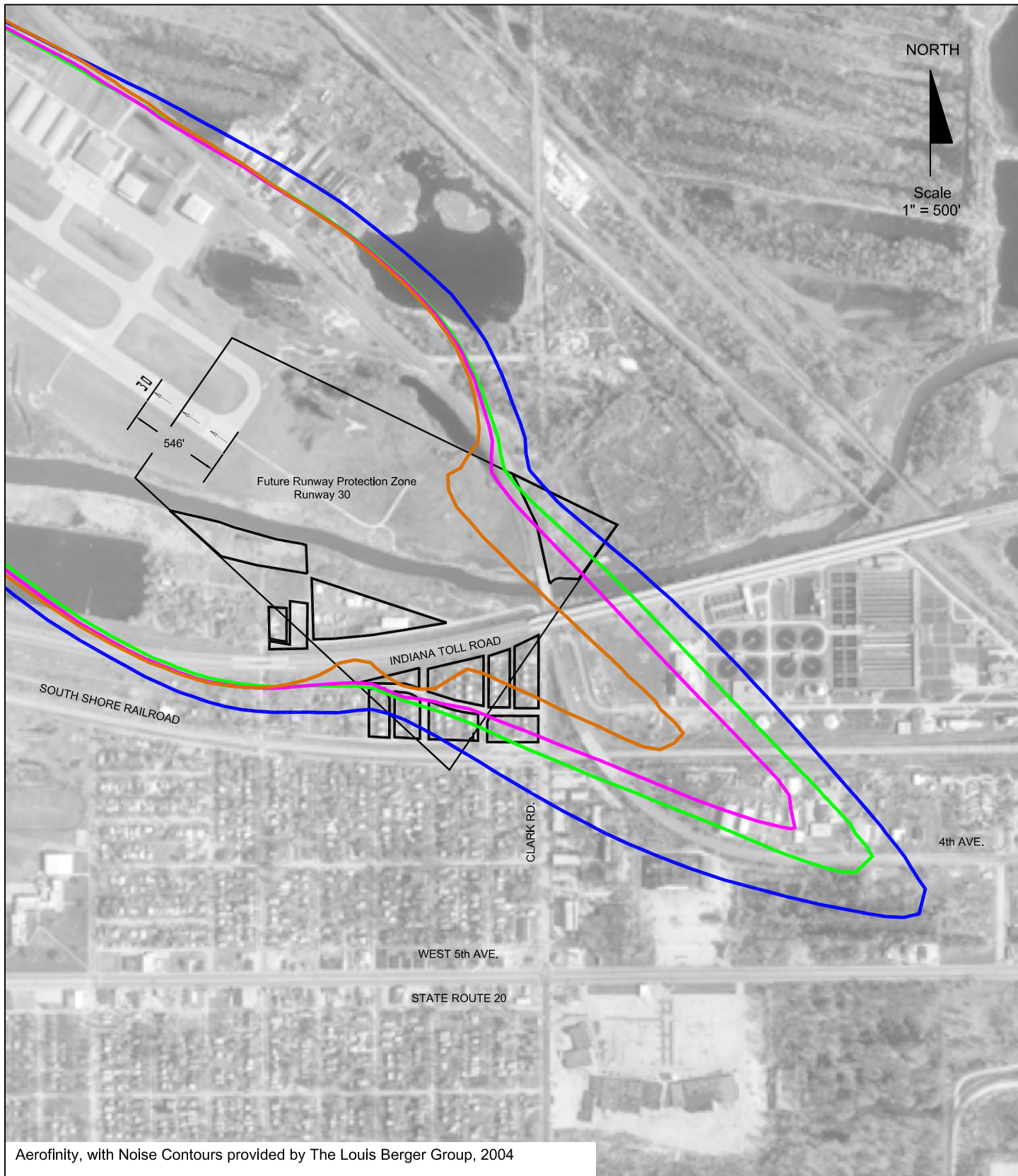
5.2.4.2.2 Future Build Condition

As shown on the noise contour maps for 2007 (see exhibits in Section 5.1, Noise), some residential, commercial, and community facilities will continue to be subject to noise between the 60-65 DNL northwest and southeast of the airport. Some non-sensitive land uses immediately surrounding the airport (to the southeast of the runway) will continue to experience (i.e., be impacted by) noise levels greater than 65 DNL, but no increases in the number of impacts for noise sensitive uses are projected. The findings of the number of residences within the 65 DNL contours have been summarized in **Exhibit 5.2-1** and illustrated in **Exhibit 5.2-2**. Under the alternative to provide safety improvements to conform to FAA requirements, the number of residences within the 65 DNL would be 22, 14 less than the 2007 No Build Conditions and 49 less than in 2000. Under the alternative to extend Runway 12-30 by 1,900 feet, the number of residences within the 65 DNL would decrease to 33, three less than the 2007 No Build Conditions and 38 less than in 2000. According to the U.S. Department of Transportation Federal Aviation Administration (FAA), residential land uses are not compatible with noise levels of 65 DNL or more unless mitigation measures have been incorporated into the construction materials. Most of the residences within the 65 DNL noise contours after implementation of the Proposed Action are already being considered for purchase and demolition because they fall within the proposed (and in some cases existing) Runway Protection Zone. A discussion of potential noise impacts also is presented in Section 5.3, Direct Socioeconomic Impacts. These approximate numbers are based on aerial photographs.

EXHIBIT 5.2-1
Residences and Businesses Within and above 65 DNL Contours
to the Southeast of the Runway

Project	Number in 65 DNL	Within 65 DNL also within the southeast RPZ purchase area
2000	71	N/A
2007 No Build	36	N/A
2007 Build 546' Runway Extension	33	26
2007 Build 1,900' Runway Extension	22	15

Noise sensitive facilities include community buildings in which the designated activities could be disturbed by intermittent high noise levels. A list of community facilities is located in **Exhibit 5.2-3** and the locations of the facilities are identified in corresponding **Exhibit 5.2-4**. There are approximately 26 community facilities within the study area. These facilities include churches, parks, schools, a stadium, public offices, medical institutions, and community centers. No noise impacts are projected for these facilities as are explained in Section 5.3, Direct Socioeconomic Impacts



Aerofinity, with Noise Contours provided by The Louis Berger Group, 2004

- Acquisition Area
- 65 DNL 2000 Base Line
- 65 DNL 2007 No Build
- 65 DNL FAA Standards
- 65 DNL 2007 Extension



Exhibit 5.2-2 Land Acquisition Area with Noise Contours

April 8, 2004

EXHIBIT 5.2-3
Impacts to Community Facilities within Study Area

				Within 65 DNL and above Noise Contours
	Name	Type	Location	
1	Washington Park	Park	NW	No
2	East Chicago Parks Recreation District Office	Public office	NW	No
3	The House of Glory	Church	NW	No
4	St. George Serbian Orthodox Church	Church	NW	No
5	The Chapel	Church	NW	No
6	St. Paul Church	Church	NW	No
7	Franklin Elementary School	School	NW	No
8	Joseph L. Block Junior High School	School	NW	No
9	Sunnyside Park	Park	NW	No
10	Raza De Bronze Hall	Community Center	NW	No
11	St. Catherine Hospital	Hospital	NW	No
	Robertson Child Development Center and East	Child Development		
12	Chicago Urban Enterprise Assoc.	Center / Public Office	NW	No
13	Kenny Lofton Little League Complex	Park	NW	No
14	Block Stadium	Stadium	NW	No
15	East Chicago Public Library	Library	NW	No
16	East Chicago Public Safety Facility	Public office	NW	No
17	East Chicago Urban Enterprise Zone Office	Public office	NW	No
18	Medical Clinic	Medical facility	NW	No
19	Segunda Iglesia Bautista	Church	NW	No
20	Neighborhood Pre-school	Child Care	NW	No
21	Mt. Horeb Missionary Baptist Church	Church	SE	No
22	Berean Fellowship Baptist Church	Church	SE	No
23	Treasures Child Development Center	Child Care	SE	No
24	Ambridge-Mann Community Center	Community Center	SE	No
25	Edison Middle School	School	SE	No
26	Gary Move of God Church	Church	SE	No



Source: The Louis Berger Group, Inc. 2003.

LEGEND

Numbers correspond to community facilities identified in Exhibit 5.2-2

North



Not to Scale



EXHIBIT 5.2-4 Community Facilities

April 8, 2004

5.2.5 Summary of Findings

The number of residences within the 65 DNL contour would decrease with the Proposed Actions: both the 546-foot extension to conform to FAA requirements and the effort to extend the runway by an additional 1,354 feet. Section 5.3, Direct Socioeconomic Impacts, further discusses the potential for noise impacts.

5.2.6 Mitigation

There is no mitigation needed based upon land use changes associated with noise. Further discussion about noise impacts occurs in Section 5.3, Direct Socioeconomic Impacts. However, most of the residences within the 65 DNL noise contours after implementation of the Proposed Action are already being considered for purchase and demolition because they fall within the future southeast (and in some cases existing) Runway Protection Zone.

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